

TransAction

From the NDDOT perspective...

Progress

It's time to re-visit TransAction

It's been more than three years since TransAction, North Dakota's Statewide Strategic Transportation Plan, was first introduced. This first plan represented more than a year of development efforts involving stakeholders representing all levels of government and all areas of transportation and its related industries. Input was solicited and received from business owners, at public input meetings, from the business community and from the public at large.

Out of that huge undertaking emerged TransAction—the statewide strategic plan that has provided a road map for North Dakota Department of Transportation efforts over the past several years as the department has carried out its mission of *providing a transportation system that safely moves people and goods*.

Each issue of TransAction Progress has kept you abreast of the progress being made relating to each of the initiatives, and this issue is no exception. And, with progress comes the need for additional change.

TransAction, as with any viable strategic plan, was written to be a living document. It is time to come back to the table, review the progress made, reevaluate the initiatives, examine industry trends and update TransAction to ensure that North Dakota's Statewide Strategic Transportation Plan continues to effectively serve its purpose, and the needs of its stakeholders.

A review document is being prepared that will provide an overview of the progress made on each initiative since the inception of TransAction. Watch for it to appear in your mail and on the internet in February 2006.

Transaction Initiative 1—North Dakota will strategically prioritize its use of transportation resources.

Personal Mobility. Under contract to the North Dakota Department of Transportation, the Small Urban and Rural Transit Center developed a plan entitled “Enhancing Personal Mobility in North Dakota through Increased Coordination.” A key component of the plan is the development of a matrix of recommended base and supplemental personal mobility service levels. The base levels of service focus on ensuring availability of, and access to, education, medical and emergency services. The full report (DP-165–ES) may be viewed on the Upper Great Plains Transportation Institute web site at www.ugpti.org

State Rail Plan Update. The Upper Great Plains Transportation Institute, under contract to NDDOT, is updating the State Rail Plan. An important element of the rail plan update has been to identify priority uses for the state's rail programs. The draft document recommends six priority factors: benefit/cost ratio, carloads generated per mile, system connectivity, economic development impacts, safety and security factors, and environmental and community impacts. The draft plan will be presented for public comment in February 2006.



Transaction Initiative 2—North Dakota will define the levels of service it will strive to provide and maintain.

Asset Management. Representatives from NDDOT attended the sixth annual Transportation Research Board Asset Management Conference in November 2005 and an Asset Management Workshop hosted by the Federal Highway Administration in December 2005. Participating in these events has enhanced NDDOT's ability to develop an Asset Management action plan that will integrate the department's various management systems. Presently, NDDOT's Planning & Programming Division staff is working with FHWA to develop a prioritized plan to achieve the department's asset management goals. The prioritized action plan will be presented to executive management for approval in early 2006.



2005 Highway Performance Classification System Report. NDDOT has begun its third analysis of progress toward the performance goals set for the Highway Performance Classification System. The report analyzes North Dakota's highways in comparison to adopted HPCS performance and infrastructure guidelines and will provide the department with valuable information to select future highway projects based on system trends and deficiencies. This and past reports will help present performance changes to the public and the 2007 legislature. The 2005 legislature endorsed the NDDOT HPCS concept.

NDDOT Pavement Preservation Program. NDDOT is currently developing a proactive pavement preservation program. In the past, NDDOT maintenance practices have primarily been applied to roadways that have deteriorated to the point where the need for repairs is evident. Experience has shown that applying preventive maintenance practices to a roadway earlier in its life cycle allows the use of lower-cost treatments. The proactive pavement preservation program will apply treatments to roadways at the appropriate time to maintain the service levels outlined in NDDOT's Highway Performance Classification System. NDDOT is currently working with the Federal Highway Administration to implement the program.

Transaction Initiative 3—North Dakota will enhance communication and facilitate cooperation and collaboration between and within governmental units, tribal authorities, modes of transportation, and the public and private sectors.

Strategic Plan Updated in 2005. The Department of Transportation recently updated its departmental Strategic Plan. This map to the future is a living, internal document that focuses its employees' efforts and attention on five high-priority goals and 29 objectives, as they carry out their functions in living the Department's mission: "providing a transportation system that safely moves people and goods."

Published in October 2005, the updated plan provides additional emphasis on customer satisfaction and the department's transportation system and services goals. The goals seek to: enhance customer service; increase safety on North Dakota's transportation system and within the Department of Transportation; improve the quality and efficiency of North Dakota's transportation system and services; enhance employee effectiveness and well-being; and strengthen stakeholder relationships.

The Director's vision statement, "Safe Ways — Great Ways — Promoting Economic Growth" and the organization's values: Professionalism, Respect, Integrity, Dedication, and Excellence, were also revalidated during the planning process.

State Rail Advisory Committee. NDDOT reactivated the State Rail Advisory Committee to assist its efforts to update the State Rail Plan. The committee's members represent local, state and federal government agencies and private sector industry groups. The committee developed 11 vision

statements that have been used to guide the development of the State Rail Plan. The draft plan will be presented for public comment in February 2006.

Aeronautics Commission Web Site. The Aeronautics Commission Web Site is being updated to include new aviation items. The site will include: a direct link to the ND Aviation Hall of Fame located in the new Bismarck Terminal; a Junior Pilot link will provide a video link to landing an aircraft at Jamestown's runway; airport aerial photos depict current construction changes to runway lengths; and video clips of all paved runways. The site may be viewed at www.state.nd.us/ndaero.

Aviation Symposium. The upcoming state Aviation Symposium is planned for March 5-8, 2006, in Bismarck. The agenda features a number of concurrent sessions with top national speakers. For more than 20 years this conference has allowed aviation businesses to display new products and safety enhancements. For more information, contact the ND Aeronautics at (701) 328-9650 or ndaero@state.nd.us.

Transaction Initiative 4—North Dakota will improve the performance of priority corridors and facilities.

Four Bears Bridge. Construction of the Four Bears Bridge, which crosses over lake Sakakawea in the northwest corner of the Fort Berthold Reservation near New Town, was completed in summer 2005, and opened to traffic in early September. The official ribbon cutting, dedication and commissioning was held October 3, and was celebrated by U.S., state and local government representatives, members of the Mandan, Hidatsa, Arikara Nation, and representatives of Native American tribes from around the nation.



Four Laning US 2. NDDOT made major strides in completing four-laning of US 2 from Minot to Williston, as contracts were let to construct approximately 45 miles of roadway during the past year. Four of the 10 projects for completing the four laning have been let to contract. Originally scheduled for completion by 2012, NDDOT accelerated the program to complete the project in 2008. To assist in meeting this timeframe, the 2005 N.D. Legislature granted the department authority to utilize bonding to finance the improvement.

Theodore Roosevelt Expressway meeting. The new Federal Highway Reauthorization bill identifies US 85 from Rapid City, S.D., through Williston, N.D., to the Canadian border as a federal high-priority corridor. A meeting was held on Dec. 8, 2005, in Dickinson to discuss the status and future development of the corridor, which is also referred to as the Theodore Roosevelt Expressway.



Approximately 50 people from throughout the region attended the meeting. Joe Kiley, vice president of the Ports-to-Plains Trade Corridor, provided an update on activities taking place on the southern portion of the corridor running from Rapid City, S.D., to the Mexican border. The NDDOT provided an overview of projects completed on US 85 during the past five years and plans for the next three years. An advisory group is being formed to promote the corridor, and communities and organizations along the

corridor are being contacted to garner support for the expressway.

It is anticipated that similar discussions will occur on the US 83 corridor. The 2005 SAFETEA-LU legislation also named US 83—which is referred to as the Central North American Trade Corridor—as a federal high-priority corridor.

Access Management. NDDOT staff is continuing to work on development of an access management program that will stress intergovernmental coordination between state and local entities and involvement of the department's various stakeholders. In October 2005, the NDDOT management

team received a presentation on the South Dakota Department of Transportation access management program by SDDOT staff. NDDOT staff is developing a request for proposal based on its research of 23 state programs and information from the Transportation Research Board and the Federal Highway Administration.

Airport Pavement Condition. A report detailing airport runway pavement conditions and a pavement repair plan for all 72 airports with hard-surfaced runways (18 N.D. airports have grass turf landing surfaces) will be released in February 2006. The study encompassed a two-year effort to video survey and score airport pavements.

A new feature of the report is the runway ride profile, which is an index of smoothness. The runway ride profile was developed using the NDDOT Pathway Survey van. Video clips of each runway will be posted on the Aeronautics Commission web site in order to visually provide pilots with an approach view of each airport and increase safety by reducing the uncertainty of the airport layout and taxiway systems.

Transaction Initiative 6—North Dakota will analyze the economic impacts of load limits and the benefits of establishing a statewide program to coordinate the administration of load limits.

Truck Weight Enforcement. The 2003 North Dakota State Legislative Session budget process called for a conceptual change in truck weight enforcement by moving away from the fixed-scale concept to a more mobile weight enforcement unit. This was accomplished by installing a total of 12 Weigh-In-Motion (WIM) sites in 2003 and 2004 on highways throughout the state. These sites record traffic/ truck volume and weight and provide 24-hour, seven-day-a-week information that can be communicated to a total of 36 Highway Patrol cruisers equipped with wireless communication packages.



NDDOT, in conjunction with DOTs from California, Florida, Indiana and Nevada, are participating in an AASHTO Technology Implementation Group (TIG) project to promote the use of Weigh-in-Motion and Virtual Weigh-in-Motion technologies for truck weight and size enforcement, credential checking, and safety compliance activities. A promotional message and video presentation is being developed based on the experience of states actively using the technologies. Presentations will be delivered to transportation and industry groups in an effort to broaden the understanding of the benefits of these technologies.

Upper Great Plains Load Limit Study. Under contract to NDDOT, the Upper Great Plains Transportation Institute has published a report analyzing the economic impacts of load limits and the benefits of establishing a statewide program to coordinate the administration of load limits. The report may be viewed on the Upper Great Plains Transportation Institute web site at www.ugpti.org.

Transaction Initiative 7—North Dakota will determine the feasibility of, and identify the conditions necessary for, developing an intermodal freight facility or facilities.

Intermodal Association of North America Annual Convention. In November, NDDOT staff and representatives from the cities of Minot and Bismarck attended the Intermodal Association of North America Annual Convention in Anaheim, Calif. The North Dakota contingent met with representatives from Class 1 railroads, steamship companies and equipment vendors to discuss the development of intermodal shipping options. A subsequent meeting was held in Bismarck in December, at which a committee was established to work on developing a North Dakota intermodal freight strategy.

Freight Rail Improvement Program. NDDOT Director, David Sprynczynatyk has approved a Freight Rail Improvement Program loan of \$804,000 for construction of a rail spur track to the Northern Plains Commerce Center in Bismarck.

Transaction Initiative 8—North Dakota will determine the opportunities for, and the economic and safety impacts of, a regional uniform truck size, weight, and permitting system.

Upper Great Plains Uniform Truck Size, Weight and Permit Study. The Upper Great Plains Transportation Institute, under contract to NDDOT, has published a report determining the opportunities for, and the economic and safety impacts of, a regional truck size, weight and permitting system. The report may be viewed on the Upper Great Plains Transportation Institute web site at www.ugpti.org. A copy of the conference report is posted on the NDDOT website: www.nd.gov/dot. A meeting of multi-state DOT directors is being planned to discuss the study's recommendations and possible implementation strategies.

WASHTO Subcommittee on Highway Transport. In September 2005, the WASHTO Subcommittee on Highway Transport met in Bismarck to discuss truck size and weight issues. Topics discussed included regional permitting, uniformity between states, automated routing systems, carrier self routing, and future legislation. Thirty-nine individuals attended the conference representing 15 companies, 13 states and one Canadian province.

Transaction Initiative 9—North Dakota will appropriately use Intelligent Transportation System (ITS) technologies to enhance service, performance, mobility, safety and security.

Road Weather Information System (RWIS) expansion. Four new stand-alone RWIS sites have been added in Bowman, Coleharbor, Denhoff and Wishek. These are the first stand-alone sites to be equipped with cameras. The first RWIS site to be equipped with a camera was the Buxton bridge, which included a camera and RWIS in conjunction with a fixed automated spray technology, or FAST, de-icing system on the bridge deck.

A second RWIS, camera and FAST system have recently been installed on the I-94 Red River bridges between Fargo and Moorhead, and the RWIS system for the Four Bears bridge has been upgraded to include a camera and re-installed in a location better suited for the new structure.

The four new stand-alone systems and the system installed on the Red River bridges bring total RWIS installations to 23.

Automated Vehicle Locator System. The department is active in an automated vehicle location and data collection project, which is designed to provide maintenance operators with up-to-date weather information, equipment coordination during adverse weather, and best maintenance strategies to combat poor road conditions caused by weather.

Anti-icing bridge deck spray system. An anti-icing bridge deck spray system has been installed on the I-94 Red River bridges. This system is similar to that installed at the I-29 Buxton railroad overcrossing, which improved safety at that location from a long history of winter-time crashes to no reportable crashes during the winter of 2004-2005.



Aviation Weather Reporting And Global Positioning Systems. In December, Fargo-Hector International airport became the second airport in North Dakota to secure a new instrument approach, following implementation of this technology by the Dickinson airport in July. Automated weather reporting units are considered necessary for air charter and ambulance service at rural hospitals.

The Aeronautics Commission is developing plans for additional units with local airport support. Surveys for the Federal Aviation Administration will be started in spring 2006 for establishing more GPS approaches at North Dakota airports currently without procedures. This widens airport access by 10-15% more time annually with all-weather flight capability.

Transaction Initiative 10—North Dakota will conduct a statewide freight origin and destination study and identify priority transportation corridors and facilities.

Multimodal Freight Forecasting course. In September, staff from NDDOT and the Fargo-Moorhead Council of Governments attended a National Highway Institute course on Multimodal Freight Forecasting in Minneapolis, Minn. The three-day course covered a number of freight planning topics including facility flow forecasting, trip generation and distribution, freight routing, data sources and site planning. The course was sponsored by the Minnesota Department of Transportation and the Federal Highway Administration.

“Talking Freight” series. NDDOT staff members continue to participate in the Federal Highway Administration’s “Talking Freight” series. The monthly web casts cover a variety of freight-related issues including freight modeling, border issues, security and safety, railroad capacity, highway bottlenecks and a variety of other issues. To participate, visit: www.fhwa.dot.gov/freightplanning/talking.htm.



Transaction Initiative 11—North Dakota will create a special transportation program (infrastructure funding and technical assistance) to facilitate economic development and competitiveness.

ND STREET Program. The ND STREET program was established to provide assistance in upgrading existing pavement infrastructure on state highways through cities with a population of less than 5,000 and to enhance the appearance of state highways and adjacent sidewalks. Four projects have been approved through this program and will be constructed in 2008.

- Ashley, ND 11. This \$250,000 project consists of reconstructing sidewalk, curb and gutter, and street lighting on the municipal section of ND 11.
- Center, ND 25. This \$325,000 project includes upgrading pavement, sidewalk construction, and curb and gutter improvements.
- Hillsboro, ND 200. This \$1.6 million project consists of replacing underground utilities, reconstructing curb and gutter, roadway surfacing, replacement lighting, and replacement of a traffic signal.
- Watford City, ND 23. This \$2 million project will include reconstruction of the 50-year-old roadway with drain, curb, gutter, sidewalk, and street lighting improvements.

The ND STREET program provides funding to improve the highway infrastructure in smaller cities, making the cities more economically competitive.

Transaction Initiative 12—North Dakota will take a lead role in promoting public-private partnerships to bring about selected transportation initiatives.

Freight Rail Improvement Program. NDDOT Director David Sprynczynatyk has approved a Freight Rail Improvement Program loan of \$110,000 for construction of a rail spur track to serve West Dakota Feed & Seed of Ross, N.D. The project will provide new shipping options for WDF&S and reduce the number of trucks used to transload grain to Stanley.

Transaction Initiative 13—North Dakota will actively participate in regional and national transportation initiatives, programs, studies and projects.

Earmark requests for the Theodore Roosevelt Expressway & Central North American Trade Corridor. The NDDOT and supporters of the Theodore Roosevelt Expressway (US 85) and the Central North American Trade Corridor (US 83) will request Congressional earmarks to conduct feasibility studies and develop corridor management plans. If approved, feasibility studies and management plans will be completed with participation from Montana and South Dakota. This will assist future efforts to access special federal funding for corridor enhancements.

Sprynczynatyk elected AASHTO VP. NDDOT Director David Sprynczynatyk has been selected to serve as vice president of the American Association of State Highway and Transportation Officials, which is a national association representing all 50 states, the District of Columbia and Puerto Rico on transportation-related issues. In 2007, he will serve as AASHTO president.

Director Sprynczynatyk is also currently serving as Western Association of State Highway & Transportation Officials president for the upcoming year. WASHTO is a group of 18 western states that work cooperatively on transportation issues on a regional and national level..

Five-State Coalition. NDDOT continues to be actively involved with South Dakota, Montana, Idaho, and Wyoming in attempting to influence the development of national transportation legislation. The coalition was very successful in working with a consultant to influence the development of the recently passed reauthorization legislation SAFTEA-LU. The group is also actively involved in reviewing and providing input into the development of federal rules and regulations impacting transportation.

Joint Rail Planning Meeting. In September 2005, NDDOT hosted a joint rail planning meeting with the Minnesota Department of Transportation, Fargo-Moorhead Council of Governments, and the Grand Forks-East Grand Forks Metropolitan Planning Organization. Also attending the meeting were members of the North Dakota State Rail Planning Advisory Committee, which included railroads serving both North Dakota and Minnesota. The purpose of the meeting was to identify and discuss rail planning issues that transcend the border between the two states. Items discussed included opportunities for joint rail infrastructure projects and improving communication between the two states and railroads.



Border Information Flow Architecture. NDDOT staff participated in a series of web conferences hosted by the Federal Highway Administration regarding the development of Border Information Flow Architecture. BIFA is an initiative comprised of stakeholders from various levels of the United States and Canadian governments to create an information flow architecture that enhances communication between government agencies and their associated technologies. The purpose of BIFA is to provide a means for cross-border Intelligent Transportation Systems technologies that interface with one another and communicate effectively.

Transaction Initiative 14—North Dakota will increase its emphasis on safety and security as integral components in planning, developing, and maintaining the transportation system.

Strategic Highway Safety Plan. As a result of additional requirements included in the new federal transportation bill, Safe, Accountable, Flexible and Efficient Transportation Equity Act-A Legacy for Users, or SAFETEA-LU, NDDOT has begun to develop its existing Comprehensive Highway Safety Plan into a Strategic Highway Safety Plan. The primary task in this process is to broaden stakeholder involvement.

The Strategic Highway Safety Plan will be developed with input from professionals in the areas of engineering, education, enforcement, and emergency medical services. Stakeholders will be involved in a data-driven approach to identify key safety emphasis areas, with the goal of having the plan in place by Oct. 1, 2006.

The Strategic Highway Safety Plan will serve as a living document to guide NDDOT and its stakeholders in implementing measures to reduce transportation-related reportable crashes, injuries, and fatalities.

Airport Safety. Freezing rains in eastern North Dakota have hampered airport runway safety. When temperatures fall below 15 degrees Fahrenheit, conventional methods of chemical de-icing have not been successful.

The Nebraska Department of Roads has been experimenting with a molasses derivative to remove ice. This is an example of a symbiotic relationship—the agriculture industry benefits through the use of sugar or corn by-products to help the transportation industry increase safety and reduce its costs for purchasing deicing chemicals.

Transaction Initiative 15—North Dakota will develop a statewide personal mobility plan.

Statewide Personal Mobility Study. Under contract to the NDDOT, the Small Urban and Rural Transit Center developed a plan, “Enhancing Personal Mobility in North Dakota through Increased Coordination,” which recommends base and supplemental personal mobility service levels for various demographic groups and geographic areas. The plan’s recommendations are currently under review by the department. The full report (DP-165) may be viewed on the Upper Great Plains Transportation Institute web site at www.ugpti.org

Southwest North Dakota Rural Transit Study. The purpose of the Southwest North Dakota Rural Transit Study is to examine the opportunity for senior citizens to ride school buses to access medical care, shopping and social events. The first phase consisted of identifying locations of inhabited farmsteads and determining where people over 65 are living. Then, school bus routes as they currently exist were mapped.

In the second phase of the study, the Small Urban and Rural Transit Center, located at North Dakota State University, will develop a proposal that will be forwarded to North Dakota’s congressional delegation requesting the delegation to secure funding for a demonstration project.

Passenger Boardings Up 5.4 Percent. Passenger boardings through November 2005 are up 5.4% at the state’s eight commercial airports. Increases are welcomed as the major airlines in North Dakota—Northwest, United and Mesaba—are operating under bankruptcy; all three have cut seat capacities in last quarter of 2005 in response to higher fuel prices and fleet changes. The outlook for 2006 will require additional state and local communication and fleet monitoring to insure North Dakota seat capacity does not drop below traffic demand. Essential Air Service funds have been renewed for continued service at Devils Lake, Dickinson, Jamestown, and Williston.

Transaction Initiative 16—North Dakota will monitor trends in agriculture, manufacturing, tourism, recreation, and energy production to identify potential transportation impacts and opportunities.

“Highway Traffic Impacts of Large Grain Elevators” teleconference.

NDDOT staff participated in “Highway Traffic Impacts of Large Grain Elevators,” a teleconference presented by the Upper Great Plains Transportation Institute that discussed the effects large grain elevators have on the highway network. Topics included trends in the transport of commodities for both rail and highway movements, and estimating the number of truck trips generated by grain elevators.



Aviation Economic Impact Report. The Aviation Economic Impact Report will be completed in March 2006. The report will contain information such as total employment and expenditures for each sector of the aviation industry at the state’s airports. The updated study will help identify trends affecting aviation, and comparison with previous reports completed in 1988, 1994, 1999 and 2004 will allow the Aeronautics Commission to do a better job of planning airport development.

Aircraft activity has followed the state’s population shift to urban areas, reducing the number of flights at rural airports. State, federal and local airport construction programming dollars are tied to airport use.

Amtrak Ridership Up 17 Percent. Amtrack ridership increased 17% in federal fiscal year 2005 with a total of 104,482 riders, up 15,343 riders from the previous year’s total of 89,139.